

Appl. No.: 10/734,452
Amdt. dated 08/15/2005
Reply to Office action of June 20, 2005

Amendments to the Specification:

The following changes to the specification are respectfully requested beginning on page 4, line 16:

FIG. 4 is a diagrammatic view showing a 90 degree arc illustrating preset angles separated by 22.5 degrees on the left and by 30 degrees on the right; and

FIG. 5 is an exploded, perspective view of the ultrasonic inspection device of **FIG. 1**, illustrating the assembly of the ultrasonic inspection device; and

FIG. 6 is a perspective view of the ultrasonic inspection device of a second embodiment of the invention, illustrating the channel and reflectors; and

FIG. 7 is a schematic, cross-sectional view of the ultrasonic inspection device of FIG. 6, illustrating the path of the ultrasonic signal.

The following changes to the specification are respectfully requested beginning on page 6, line 18:

FIG. 3 illustrates the path of the ultrasonic signal **18** through the channel **32**. The transducer **12** is in communication with the housing **16** and is preferably threaded into the housing, such that the transducer generally does not move relative to the housing. The transducer **12** may be oriented at any position relative to the housing **16**, such as the angled orientation of the transducer illustrated in **FIG. 2**. The transducer **12** must be attached such that the transmitted and received ultrasonic signal **18** reflects off a reflector, such as the fixed reflector **34** and/or the rotating reflector **36**. In the illustrated embodiment, the ultrasonic signal **18** is sent from the ultrasonic transducer **12** and reflects off the fixed reflector **34** and then reflects from the rotating reflector **36** out the aperture **30** toward a portion of the component **20**. The fixed reflector **34** and the rotating reflector **36** are in communication with the channel **32**. The ultrasonic signal **18** is coupled to the component **20** and propagates therethrough with some portion of the ultrasonic signal reflecting from defects within the component back to the inspection device for reception by the ultrasonic transducer **12**. The reflected ultrasonic signal

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18 travels back to the transducer **12** and is received by the transducer in a reverse order from which it was sent. Alternatively, the transmitted ultrasonic signal **118** may first reflect off the rotating reflector **136** and then the fixed reflector **134**, as illustrated in FIGS. 6 and 7. In addition, three or more reflectors may be included, or only the rotating reflector **36** may be included in further embodiments of the present invention.